

LISTING OF THE CLAIMS

1. (Previously Presented) A method of controlling a telecommunications network comprising the steps of:

recognizing a condition;

initiating a first call in response to recognizing the condition, including transmitting a first call set-up message indicating a first special calling party number;

detecting a trigger when said first call reaches a switching point in the telecommunications network;

in response to detecting the trigger, transmitting a first query message to a control point in the telecommunications network, said first query message including said special calling party number;

receiving said first query message at said control point; and

storing an indicator of said condition in response to receiving said first special calling party number.

2. (Previously Presented) The method of claim 1 further comprising the steps of:

recognizing a change of said condition;

initiating a second call in response to recognizing the change of said condition, including transmitting a second call set-up message indicating a second special calling party number;

detecting a trigger when said second call reaches a switching point in the telecommunications network;

transmitting a second query message including said second special calling party number;

receiving said other query message including said second special calling party number; and

updating said indicator of said condition in response to receiving said second special calling party number.

3. (Previously Presented) The method of claim 2 wherein said first and second special party numbers are different invalid calling party numbers.

4. (Original) The method of claim 2 wherein said step of updating said indicator includes a step of updating said indicator to a status existing prior to said step of storing.

5. (Previously Presented) The method of claim 1 wherein said step of recognizing a condition includes a step of determining a status associated with a subscriber telephone number and said step of initiating a first call includes a step of calling said subscriber telephone number.

6. (Previously Presented) The method of claim 1 wherein said step of detecting a trigger is performed at a terminating switch serving a subscriber telephone line.

7. (Previously Presented) The method of claim 6 wherein said step of initiating said first call includes calling a telephone number of said subscriber telephone line.

8. (Previously Presented) The method of claim 1 wherein said step of storing an indicator of said condition in response to receiving said first special calling party number includes a step of setting a flag as part of a call processing record of an associated subscriber.

9. (Original) The method of claim 1 further comprising a step of transmitting a disconnect request.

10. (Previously Presented) A telecommunications system comprising:
a switched telephone network including a plurality of switching points interconnected by a plurality of communications links, and further including a number of subscriber lines associated with respective subscribers;

a database connected to the switched telephone network, the database storing call processing records associated with respective subscribers of said switched telephone network;

a server configured to detect a condition of a subscriber line associated with one of the respective subscribers and, in response to detecting the condition, initiate a call to the subscriber line including a call set-up message indicating a special calling party number;

wherein said switching points are configured to receive the call set-up message and transmit a query message to said database in response to receiving said call set-up message, the query message including the special calling party number, and wherein said database is configured to receive said query message and to set a service status flag of a call processing record associated with said subscriber line in response to receiving the special calling party number.

11. Canceled

12. (Previously Presented) The telecommunications system of claim 10 further comprising a server configured to detect a condition associated with said one subscriber and, in response, initiate said call to said one subscriber including said special calling party number, wherein said special calling party number being an invalid telephone number indicative of said condition.

13. (Original) The telecommunications system of claim 10 wherein said service status flag is also associated with said one subscriber.

14. Canceled

15. (Previously Presented) The telecommunications system of claim 10 wherein said switching points are configured to selectively route an incoming call in response to a message from said database, said message reflecting a status of said service status flag.

16. (Previously Presented) The telecommunications system of claim 10 wherein said database comprises a Service Control Point (SCP), and said plurality of switching points comprise a plurality of Service Switching Points (SSPs).

17. Canceled.

18. (Previously Presented) A switched telephone network comprising:

a plurality of a Service Switching Points (SSPs) configurable to provision triggers associated with telephone lines of designated ones of subscribers served by respective ones of said SSPs;

a system configured to detect a condition associated with one of the telephone lines of one of the designated subscribers of the telephone network and, in response to said condition, initiate a call to said telephone line using an ISDN User Part (ISUP) call set-up message including a special calling party number;

a service control point (SCP) connected to said plurality of SSPs and configured to store service status associated with each of said designated subscribers;

wherein said plurality of SSPs are further configured to receive the ISUP call set-up message including the special calling party number and, in response, transmit a TCAP query message including the special calling party number to the SCP, and wherein the SCP is configured to receive the query message, modify the service status indicator associated with the one of the designated subscribers based on the special calling party number, and supply call handling instructions based on the service status indicator associated with the one of the designated subscribers for subsequent calls to said telephone line.

19. (Previously Presented) The telecommunications system of claim 18 wherein said special party numbers are different invalid calling party numbers associated with respective conditions to be reflected by said service status indicators.

20. (Previously Presented) A method of processing calls to a telephone line serving a called party, comprising the steps of:

identifying a connection status of said telephone line of said called party;
in response to determining a busy condition --

(a) initiating a first call to said called party using a special calling party number,

(b) transmitting a first query message to a remote control point, said first query message including said special calling party number, and

(c) in response to receiving said special calling party number at the remote control point, setting a status indicator of said telephone line at said remote control point;

receiving a request for a second call to the telephone line, the second call from a calling party;

initiating the second call using a second call set-up message indicating a calling party number associated with the calling party; and

transmitting a second query message to the remote control point, said second query message including the calling party number associated with the calling party.

21 (Previously Presented) The method of claim 1 wherein said first call set-up message comprises an ISDN User Part (ISUP) message.

22 (Previously Presented) The method of claim 21 wherein: said step of transmitting a first query message includes transmitting a Transaction Capabilities Application Part (TCAP) message from said switching point to the control point; the control point comprises a Service Control Point (SCP); and

said first special calling party number transmitted in a calling party identification portion of said TCAP message, said first special calling party number recognized as an invalid telephone number.

23 (Previously Presented) The method of claim 21 further comprising a step of processing, in response to said indicator, a subsequent third call initiated to the same telephone number as said first call.

24 (Previously Presented) The method of claim 20 wherein said step of initiating a first call to said called party includes transmitting an ISDN User Part (ISUP) message to a Service Switching Point (SSP) serving said called party.

25. (Previously Presented) The method of claim 24 wherein:
Said step of transmitting a first query message includes transmitting a Transaction Capabilities Application Part (TCAP) message from said SSP to the remote control point;
the remote control point comprises a Service Control Point (SCP); and

said special calling party number is transmitted in a calling party identification portion of said TCAP message, said special calling party number recognized as an invalid telephone number.